



6450-01-P

DEPARTMENT OF ENERGY

National Nuclear Security Administration

Amended Record of Decision for the for the Complex Transformation Supplemental Programmatic Environmental Impact Statement

AGENCY: National Nuclear Security Administration, Department of Energy.

ACTION: Amended record of decision.

SUMMARY: The National Nuclear Security Administration (NNSA), a semi-autonomous agency within the U.S. Department of Energy (DOE), is announcing this amendment to the December 19, 2008, Record of Decision (ROD) for the Complex Transformation Supplemental Programmatic Environmental Impact Statement—Operations Involving Plutonium, Uranium, and the Assembly and Disassembly of Nuclear Weapons (Complex Transformation SPEIS—2008 Programmatic ROD). In this Amended ROD, NNSA announces its programmatic decision to implement elements of a Modified Distributed Centers of Excellence (DCE) Alternative whereby NNSA would produce a minimum of 50 war reserve pits per year at a repurposed Mixed-Oxide Fuel Fabrication Facility (MFFF) at the Savannah River Site (SRS) during 2030 for the national pit production mission and implement surge efforts to exceed 80 pits per year up to the analyzed limit as necessary beginning during 2030 for the nuclear weapons stockpile. This decision is supported at a programmatic level by the analysis in a Supplement Analysis (SA) to the Complex Transformation SPEIS (2019 SPEIS SA) (DOE/EIS-0236-SA-02), which NNSA prepared in 2019. After preparing and considering the 2019 SPEIS SA, NNSA has determined that no further NEPA analysis is needed at a programmatic level prior to issuing this Amended ROD.

FOR FURTHER INFORMATION CONTACT: For further information on this Amended ROD, contact: Mr. James R. Sanderson, Office of NEPA Policy and Compliance, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585–0119; phone: (202) 586–1402; or email to: *Jim.Sanderson@hq.doe.gov*. This Amended ROD, the 2019 SPEIS SA, and related NEPA documents are available on the NNSA NEPA Reading Room website at <https://www.energy.gov/nnsa/nnsa-nepa-reading-room>.

SUPPLEMENTARY INFORMATION

Background

NNSA has a statutory mission to maintain and enhance the safety, reliability, and performance of the U.S. nuclear weapons stockpile, including the ability to design, produce, and test, in order to meet national security requirements. In the Complex Transformation SPEIS, NNSA considered how to configure facilities that hold Category I and Category II quantities of Special Nuclear Material (SNM) across the nuclear weapons complex (Complex), including the three functional areas of plutonium, uranium operations, and assembly/disassembly/high explosives in various ways. These alternatives were broadly categorized into a DCE Alternative, a Consolidated Centers of Excellence (CCE) Alternative, and Capability-Based Alternative. The Complex Transformation SPEIS also analyzed a No Action Alternative. Pit production levels of up to 200 pits per year at a single site were analyzed in the DCE and CCE Alternatives, and nominal pit production levels of up to 50 pits per year were analyzed under the Capability-Based Alternative. With respect to plutonium operations and pit production, the 2008 Programmatic ROD continued NNSA’s prior decision to produce 20 pits per year at the Los Alamos National Laboratory (LANL) until completion of a future Nuclear Posture Review (NPR).

Both Federal law and national security policy now require pit production rates of not less than 80 pits per year nationally beginning during 2030 (50 U.S.C. 2538a, as amended). On September 2, 2020, NNSA published an Amended ROD for its programmatic decision to implement elements of a Modified DCE Alternative from the Complex Transformation SPEIS whereby LANL will produce a minimum of 30 war reserve pits per year for the national pit production mission during 2026 and implement surge efforts to exceed 30 pits per year as needed (85 FR 54550). That decision is unchanged by this Amended ROD. Because operations involving SNM are complex, implementing changes in operations such as pit production takes several years. NNSA is now issuing this Amended ROD on those aspects of the national pit production mission at SRS that have been analyzed at both the programmatic and site-specific level by final environmental impact statements. The scope of this Amended ROD is limited to plutonium operations related to pit production to sustain NNSA's pit production capability and fulfill NNSA's requirements under Federal law and national policy. All other activities conducted pursuant to decisions announced in the 2008 Programmatic ROD are outside the scope of this decision.

Synopsis of the Programmatic EIS and the Supplemental Programmatic EIS Related to Plutonium Operations and the Associated Records of Decision

During the Cold War, the U.S. maintained a pit production capacity of approximately 2,000 pits per year (actual production numbers are classified) but lost this large-scale production capability in the late 1980s. In 1996, the environmental effects of a production rate of up to 80 pits per year at SRS and LANL were analyzed in the *Programmatic Environmental Impact Statement for Stockpile Stewardship and Management* (DOE/EIS-0236) (SSM PEIS). In December 1996, NNSA issued a ROD announcing a decision setting pit production at LANL at 20 pits per year (61 FR 68014; December 26, 1996). Tiering from the SSM PEIS, the 1999 *Site-Wide*

Environmental Impact Statement for the Continued Operation of Los Alamos National Laboratory (DOE/EIS-0283) (1999 LANL SWEIS) provided site-specific analysis for pit production levels at LANL of up to 80 pits per year. In the 1999 LANL ROD, NNSA confirmed its decision for pit production at LANL at 20 pits per year. Various supplements to and re-evaluations of the SSM PEIS were completed over the next several years.

In 2008, NNSA prepared the Complex Transformation SPEIS, which analyzes the potential environmental impacts of alternatives for transforming the Complex in a manner consistent with national policy. Acknowledging the shifting needs of national security policy, the Complex Transformation SPEIS was prepared to provide NNSA with a flexible programmatic EIS that could be tiered from when the United States faced the need to implement changes to operations such as pit production. As it relates to plutonium operations, the Complex Transformation SPEIS evaluates the potential impacts of alternatives for structuring the Complex including the DCE Alternative, CCE Alternative, and Capability-Based Alternative, and each of these alternatives have several sub-alternatives. The 2008 LANL SWEIS again provided site-specific analysis for pit production levels at LANL of up to 80 pits per year. In the 2008 LANL SWEIS ROD and subsequent RODs, NNSA selected a No Action Alternative (continuation of existing operations) with some elements of an Expanded Operations Alternative, which maintained NNSA's decision for pit production levels of 20 pits per year at LANL. In September 2020, NNSA finalized its first site-specific analysis for pit production at SRS, the *Final Environmental Impact Statement (EIS) for Plutonium Pit Production at the Savannah River Site (SRS) in South Carolina* (DOE/EIS-0541).

The Complex Transformation SPEIS considered a wide range of alternatives to provide NNSA with sufficient flexibility in the continued transformation of the Complex. Some of the specific

elements of different alternatives and sub-alternatives in the Complex Transformation SPEIS include an analysis of the impacts associated with construction of a new pit production facility to produce 125 pits per year, with surge capacity to produce 200 pits per year. Sites that the Complex Transformation SPEIS evaluates for this level of pit production include LANL, SRS, the Pantex Plant (Pantex) in Texas, the Y-12 National Security Complex (Y-12) in Tennessee, and the Nevada National Security Site in Nevada. At LANL, the Complex Transformation SPEIS also includes an analysis of two distinct upgrades to existing facilities, rather than construction of a new facilities, including one to support production of 125 pits per year (with surge capacity to produce 200 pits per year) and one to support production of 50-80 pits per year. At SRS, the Complex Transformation SPEIS evaluated a pit production facility that would use the planned MFFF and Pit Disassembly and Conversion Facility infrastructure. The alternative selected in the 2008 Programmatic ROD was a combination of the DCE Alternative and a Capability-Based Alternative in which, with respect to plutonium operations, NNSA did not make any new decisions related to pit production capacity beyond 20 pits per year at LANL.

Changes Since Issuance of the Complex Transformation 2008 Programmatic ROD

The United States has emphasized the need to eventually produce 80 pits per year and while the drivers and the requirement for pit production have remained relatively unchanged there have been specific changes in the law and national policy regarding pit production since issuance of the Complex Transformation SPEIS. Since 2014, Federal law has required the nuclear security enterprise to produce not less than 30 war reserve plutonium pits during 2026. Federal law now requires that the nuclear security enterprise produces not less than 80 war reserve plutonium pits during 2030 (50 U.S.C. 2538a, as amended).

In addition, on January 27, 2017, the President directed the Department of Defense (DoD) to conduct an NPR which was issued in 2018. The 2018 NPR echoed the need for pit production and articulated a national policy that is consistent with Congressional and Presidential direction, stating that the United States will pursue initiatives to ensure the necessary capability, capacity, and responsiveness of the nuclear weapons infrastructure and the needed skill of the workforce, including providing the enduring capability and capacity to produce plutonium pits at a rate of no fewer than 80 pits per year during 2030. The 2018 NPR also details the evolving and uncertain nuclear threat environment facing the United States. Concurrent with the 2018 NPR, DOE conducted an Analysis of Alternatives (AoA) to identify and assess alternatives across DOE sites that could deliver the infrastructure to meet the sustained plutonium pit requirements of 80 pits per year. To achieve the required annual pit production rate, the AoA report considered the construction of new facilities and the refurbishment of existing facilities and identifies SRS and LANL as the two preferred alternatives to meet pit production requirements.

In 2018, Congress and the President also directed that LANL will produce a minimum of 30 pits per year for the national pit production mission and directed it be capable of surge efforts to exceed 30 pits per year to meet NPR and national policy (Public Law 115-232, Section 3120). To these ends, the DoD Under Secretary of Defense for Acquisition and Sustainment and the NNSA Administrator issued a Joint Statement on May 10, 2018, describing NNSA's recommended alternative to pursue a two-site approach—50 pits per year produced at SRS and a minimum of 30 pits per year produced at LANL. In addition to improving the resiliency, flexibility, and redundancy of our nuclear security enterprise by reducing reliance on a single production site, this approach enables the capability to allow for enhanced warhead safety and security to meet DoD and NNSA requirements; deliberate, methodical replacement of older existing plutonium

pits with newly manufactured pits as risk mitigation against plutonium aging; and response to changes in deterrent requirements driven by renewed great power competition.

Finally, since issuance of the 2008 Programmatic ROD, a significant portion of the MFFF at SRS has been constructed. At the time that the Complex Transformation SPEIS was being completed, construction of the MFFF had just begun. The MFFF was built to produce mixed oxide fuel from surplus plutonium for use in commercial nuclear reactors. For a variety of reasons NNSA issued a Notice of Termination to the MFFF construction contractor on October 10, 2018, cancelling the contract for the facility. The constructed portion of MFFF was built to current safety and security standards and contains three floors and more than 400,000 square feet of available space. The potential availability of this facility is, in part, why NNSA has reevaluated a single pit production site at the programmatic level and has recently completed a site-specific NEPA analysis for pit production at SRS.

NEPA Process for Amending the ROD

NNSA prepared this Amended ROD pursuant to the regulations of the Council on Environmental Quality (CEQ) for implementing NEPA (40 CFR parts 1500-1508) and DOE's NEPA implementing procedures (10 CFR part 1021). This Amended ROD is based on information and analysis in the Complex Transformation SPEIS (DOE/EIS-0236-S4) issued on October 24, 2008 (73 FR 63460) and public comments received; the 2019 SPEIS SA (DOE/EIS-0236-SA-02) and public comments received; other NEPA analysis and public comments as noted in the 2019 SPEIS SA; and other factors including Federal law and NNSA's mission.

The Draft Complex Transformation SPEIS included a robust public participation process. NNSA received comments from Federal agencies; state, local, and tribal governments; public and private organizations; and individuals. In addition, during the 20 public meetings that NNSA

held on the Draft Complex Transformation SPEIS, more than 600 speakers made oral comments. NNSA reviewed and considered all comments received on the Draft Complex Transformation SPEIS before issuing the 2008 Programmatic ROD.

NNSA prepared the 2019 SPEIS SA to determine whether, prior to proceeding with the effort to produce plutonium pits at a rate of not less than 80 pits per year beginning during 2030, the existing Complex Transformation SPEIS should be supplemented, a new environmental impact statement be prepared, or that no further NEPA analysis is required. Although pertinent regulations do not require public comment on an SA, NNSA decided, in its discretion, that public comment in this instance would be helpful. NNSA issued the Draft 2019 SPEIS SA for public review on June 28, 2019 (84 FR 31055). NNSA considered all comments received during the public comment period. NNSA also reviewed all comment documents received during the public scoping process for the site-specific SRS Pit Production EIS for relevance to the 2019 SPEIS SA. NNSA included a comment response document as Appendix A to the Final 2019 SPEIS SA. The Final 2019 SPEIS SA was announced on January 8, 2020 (85 FR 887). Since announcing the availability of the Final 2019 SPEIS SA, NNSA has received additional comments related to the need for a programmatic EIS. NNSA considered those comments during the preparation of this Amended ROD.

Summary of Impacts

In Section 2.3 of the 2019 SPEIS SA, NNSA discusses environmental changes at SRS and LANL that have occurred since publication of the Complex Transformation SPEIS and that are relevant to the analysis in the 2019 SPEIS SA. The 2019 SPEIS SA analyzes the potential impacts of the Proposed Action on land resources, visual resources, noise, air quality, water resources, geology and soils, ecological resources, cultural resources, socioeconomics,

environmental justice, infrastructure, health and safety for normal operations, accidents and intentional destructive acts, waste management, and transportation and traffic. Section 3.2 of the 2019 SPEIS SA provides (1) a summary of the potential environmental impacts from the Complex Transformation SPEIS, (2) the estimate of potential impacts specific to the Proposed Action, and (3) a more detailed analysis of potential impacts for those NEPA resource areas where NNSA determined that there might be potentially significant new circumstances or information relevant to environmental concerns. Tables 3-1 and 3-2 of the 2019 SPEIS SA present information in a comparative fashion for each resource area. Table 3-3 addresses the combined impacts, to the extent that they are known at this time, from pit production at both SRS and LANL. Table 3-4 addresses Complex-wide transportation impacts. Section 4.0 of the 2019 SPEIS SA analyzes cumulative impacts at both a programmatic level and site-specific level. NNSA's conclusion based on the Final 2019 SPEIS SA is that complex-wide impacts of adopting a Modified DCE Alternative for plutonium operations for all resource areas would not be different, or would not be significantly different, than impacts in existing NEPA analyses. NNSA has determined that that the proposed action does not constitute a substantial change from actions analyzed previously and there are no significant new circumstances or information relevant to environmental concerns. Thus, consistent with 10 CFR 1021.315(e), the existing 2008 Programmatic ROD for the Complex Transformation SPEIS can be amended at this time to document NNSA's decision to implement the two-site approach for pit production at SRS and LANL. In addition, NNSA is separately issuing a ROD for the site-specific SRS Pit Production EIS.

Environmentally Preferable Alternative

The analyses in the Complex Transformation SPEIS of the environmental impacts associated with the programmatic alternatives indicated that the No Net Production/Capability Based Alternative is environmentally preferable. Under this alternative NNSA would maintain capabilities to continue surveillance of the weapons stockpile, produce limited life components, and dismantle weapons, but would not add new types or increased numbers of weapons to the stockpile. This alternative would result in the minimum infrastructure demands, produce the least amount of wastes, reduce worker radiation doses, and require the fewest employees. Almost all of these reductions in potential impacts result from the reduced production levels assumed for this alternative. The environmentally preferable alternative for programmatic alternatives accounts for actions across the complex at multiple sites. This determination may not apply to site-specific determinations where other factors are considered in the analysis.

Amended Decision

NNSA has decided at a programmatic level to implement aspects of a Modified DCE Alternative from the Complex Transformation SPEIS to produce a minimum of 50 pits per year at a repurposed MFFF at SRS, with additional surge capacity, if needed, to meet the requirements of producing not less than 80 pits per year beginning during 2030 for the nuclear weapons stockpile. This decision continues the transformation of the Complex following the end of the Cold War and the cessation of nuclear weapons testing, particularly decisions announced in the 1996 ROD for the SSM PEIS (DOE/EIS-0236) (61 FR 68014; Dec. 26, 1996) and the 2008 Programmatic Alternatives ROD for the Complex Transformation SPEIS. This Amended ROD modifies only the plutonium operations aspects of the 2008 Programmatic ROD. NNSA has made no proposals to, and there are no changes to, NNSA's decisions on other aspects of the

2008 Programmatic ROD or to the September 2020 Amended ROD to produce a minimum of 30 war reserve pits per year at LANL for the national pit production mission during 2026 and implement surge efforts to exceed 30 pits per year as needed.

Basis for Decision

In making this decision, NNSA considered the 2019 SPEIS SA, the Complex Transformation SPEIS, other referenced NEPA analyses, and its statutory responsibilities to support the nuclear weapons stockpile. Federal law and national security policies continue to require NNSA to maintain a safe, secure, and reliable nuclear weapons stockpile and create a responsive nuclear weapons infrastructure that are cost-effective and have adequate capacity to meet reasonably foreseeable national security requirements. This Amended ROD will enable NNSA to continue meeting Federal law and national security requirements.

Mitigation Measures

As described in the Complex Transformation SPEIS and the 2008 Programmatic ROD, NNSA operates in compliance with environmental laws, regulations, and policies within a framework of contractual requirements; many of these requirements mandate actions to control and mitigate potential adverse environmental effects. Examples of mitigation measures include site security and threat protection plans, emergency plans, Integrated Safety Management Systems, pollution prevention and waste minimization programs, cultural resource and protected species programs, and energy and water conservation programs. Any additional site-specific mitigation actions would be identified in site-specific NEPA documents.

Signing Authority

This document of the Department of Energy was signed on October 30, 2020, by Lisa E. Gordon-Hagerty, Under Secretary for Nuclear Security and Administrator, NNSA, pursuant to delegated

authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the *Federal Register*.

Signed in Washington, DC, on October 30, 2020.

Treena V. Garrett,

Federal Register Liaison Officer,

U.S. Department of Energy.

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